

DECLARATION

In the matter of the U.S. Patent Application No. 10/021,904

I, the undersigned, Hiroshi SHIMURA, whose full Post Office address is 6-1, Minamikamata 2-chome, Ohta-ku, Tokyo 144-0035 Japan do solemnly and sincerely declare as follows:

- (1) That I am well acquainted with the English and Japanese languages and am competent to translate from Japanese into English.
- (2) That I have executed, with the best of my ability, a true and correct translation into English of the document JP 11-25307A.

SIGNED AT: Tokyo Japan

DATE: October 26, 2004

Hiroshi SHIMURA

JP 11-25307

[WHAT IS CLAIMED IS:]

[Claim1] Aprize-winningproduct selection device comprising: a reading means, reading code information, provided to each product and enabling individual identification of each product; and

a selection means, selecting, from among the code information that can be read by the reading means, a specific code information as a prize-winning code information.

[Claim 2] The prize-winning product selection device according to Claim 1, further comprising:

a judging means, comparing the code information read by said reading means and the code information selected by said selection means and judging whether or not the two correspond to each other; and

a notification means, notifying the judgment result of said judging means.

[Claim 3] The prize-winning product selection device according to Claim 2, wherein when said judging means judges that the code information read by said reading means and the code information selected by said selection means correspond to each other, said notification means notifies that the product of the code information that was read by said reading means is

a prize-winning product.

[Claim 4] The prize-winning product selection device according to Claim 2 or 3, further comprising a storage means, storing the code information of all products that are read by said reading means and prize-winning identification information, indicating which of the code information among the code information of all products are prize-winning code information, and wherein said selection means operates on the prize-winning identification information and makes the selected prize-winning code information be stored in said storage means, and said judging means, judges, based on said prize-winning identification information, the winning or non-winning of the code information subject to judgment.

[Claim 5] The prize-winning product selection device according to Claim 4, wherein said storage means is a rewritable, non-volatile memory.

[Claim 6] A computer-readable storage medium, storing a program for making a computer execute:

a first step of reading code information, provided to each product and enabling individual identification of each product; a second step of selecting, from among the code information read in said first step, a specific code information as a prize-winning code information;

a third step of comparing the code information read in said first step and the code information selected in said second step and judging whether or not the two correspond to each other; and

a fourth step of notifying the judgment result of said third step.

[DETAILED DESCRIPTION OF THE INVENTION]

[0001]

[Field of the Invention] This invention concerns a prize-winning product selection device for prize events, etc., that are held for the purpose of sales promotion.

[0002]

[Prior Art] Since conventionally, prize events, in which a lottery is carried out and prizes are awarded to purchasers of products, have been held for the purpose of sales promotion. In general, such a prize event takes a form wherein lottery tickets, on which lottery numbers are indicated, are distributed to purchasers of products and prizes are subsequently awarded to those having lottery tickets with winning numbers that have been selected by lottery.

[0003]

[Problems to be Solved by the Invention] However, with such a form of prize event, the burden in terms of cost is large on the part of the promoter of the event in that lottery tickets and lottery devices have to be prepared in advance and much manpower is required. Thus the smaller the scale of a retail store, the more difficult it was to hold such an event.

[0004] Meanwhile, on the part of the purchasers of products, there is the possibility of losing the lottery tickets and the

burden of having to perform the task of collating the winning number. The above-described form of prize event was also not favorable in terms of environmental problems in that large amounts of waste, such as lottery tickets that had become unnecessary, etc., are generated.

[0005] This invention has been made in view of the above issues, and a technical object thereof is to provide a prize-winning product selection device, with which the lottery selection task can be carried out readily without the use of lottery tickets, etc.

[0006]

[Solving Means] This invention's prize winning product selection device comprises: a reading means, reading code information, provided to each product and enabling individual identification of each product; and a selection means, selecting, from among the code information that can be read from the reading means, a specific code information as a prize-winning code information.

[0007] With such an arrangement, since the selection means selects a prize-winning product or a non-prize-winning product based on the code information attached to each individual product, there is no need to separately prepare lottery tickets, etc. provided with lottery numbers, and the lottery selection task

can be carried out speedily and accurately without erroneous recognition due to human-performed tasks.

[0008] This invention's prize-winning product selection may also be equipped with: a judging means, comparing the code information read by the above-mentioned reading means and the code information selected by the above-mentioned selection means and judging whether or not the two correspond to each other; and a notification means, notifying the judgment result of the above-mentioned judging means.

[0009] Preferably, when the above-mentioned judging means judges that the code information read by the above-mentioned reading means and the code information selected by the above-mentioned selection means correspond to each other, the above-mentioned notification means notifies that the product of the code information that was read by the above-mentioned reading means is a prize-winning product.

[0010] By such a judging means and notification means being equipped, whether or not an arbitrarily selected product is a prize-winning product can be recognized readily and speedily, and, for example, the checking of a prize-winning product can be performed in parallel to the accounting process during purchase of a product, thus enabling customers to be accommodated speedily and also enabling the reduction of the management costs

concerning the checking of prize-winning products, etc.

[0011] This invention's prize-winning product selection device may further comprise: a storage means, storing the code information of all products that are read by the above-mentioned reading means and prize-winning identification information, indicating which of the code information among the code information of all products are prize-winning code information, the above-mentioned selection means may be arranged to operate on the prize-winning identification information and make the selected prize-winning code information be stored in the above-mentioned storage means, and the above-mentioned judging means may be arranged to judge, based on the above-mentioned prize-winning identification information, the winning or non-winning of the code information subject to judgment.

[0012] By providing such a storage means, since the prize-winning code information is selected from among all code information read by the reading means, a prize-winning product can be selected definitely without selection error from among all products.

[0013] The above-mentioned storage means may be a rewritable, non-volatile memory. With such an arrangement, the contents of table data stored in the storage means are held constantly and can be prevented from being erased inadvertently.

[0014] This invention also provides a computer-readable storage medium, which stores a prize-winning selection program, and this storage medium stores a program for making a computer execute: a first step of reading code information, provided to each product and enabling individual identification of each product; a second step of selecting, from among the code information read in the above-mentioned first step, a specific code information as a prize-winning code information; a third step of comparing the code information read in the above-mentioned first step and the code information selected in the above-mentioned second step and judging whether or not the two correspond to each other; and a fourth step of notifying the judgment result of the above-mentioned third step.

[0015] A CD-ROM (Compact Disk Read Only Memory), an MO (Magnet Optic Disk), etc., can be cited as examples of the above-mentioned storage medium.

[0016]

[Best Mode for Carrying Out the Invention] An embodiment of this invention's prize-winning product selection device shall now be described. Fig. 1 is a block diagram of a prize-winning product selection device 1, which is an embodiment of this invention.

[0017] Information, such as the product item number, client

identification number, serial number, etc., are coded and recorded in a barcode 5. Barcode 5 is adhered onto each individual product at the time of shipment, and as is well known, is read by a cash register with bar code reader at a check stand of a retail store, etc., for display of the product name, selling price, etc., and for use in sales management.

[0018] A reader unit 20, which serves as a reading means, reads the code information recorded in barcode 5. Reader unit 20 illuminates illumination light, from a built-in light source (not shown), onto barcode 5, receives the reflected light and optically reads the recorded information of barcode 5, and outputs the code information recorded in barcode 5 to a system control unit 30.

[0019] System control unit 30, which serves as a selection means and a judging means, performs comprehensive control of the overall operations of prize-winning product selection device 1 and is composed of a microcomputer.

[0020] The above-mentioned system control unit 30 has the two operation modes of a product management mode and a setting mode. The former product management mode is an operation mode that is executed during the sale of a product, and in this mode, a process is carried out wherein, based on the information of the product item number, client identification number, and

serial number (these shall be referred to hereinafter collectively as "product information"), which are output from reader unit 20, table data stored in advance in a memory unit 33, which serves as a storage means, are referenced, the product name, the price of the product, and whether or not the product is a prize-winning product are recognized, and the total price of products, the recognized information, etc., are displayed as necessary on a display unit 40, which serves as a notification means, to notify a user.

[0021] The latter setting mode is an operation mode that is executed prior to the sale of products, such as when products are delivered, etc., and in this mode, a process of changing and setting the values of the table data to set prize-winning products for a prize event is carried out.

[0022] The above-mentioned display unit 40 is composed, for example, of a liquid crystal display panel and, under control by system control unit 30, displays various information, a menu screen for selecting the operation mode, operation conditions of prize-winning election device 1, etc.

[0023] The means of notification to a user is not limited to a display device, such as display unit 40, and may be a speaker or other audio device, and obviously, a display device and an audio device may be combined. An operation unit 35, which is

connected to the above-mentioned system control unit 30, is composed of a so-called keyboard input device. This operation unit 35 is operated to input product prices and other various setting information, select the operation mode of system control unit 30, and issue commands, etc.

[0024] The memory unit 33 is composed of a rewritable, non-volatile memory, such as an EEPROM (Electrically Erasable Programmable Read Only Memory), etc., and the table data values that are stored are held constantly even when the power of prize-winning product selection device 1 is turned off. Also, the reading of information from memory unit 33 and writing of information into memory unit 33 are controlled by system control unit 30.

[0025] Fig. 2 schematically shows an example of the contents of the table data stored in memory unit 33. The table data are for associating the input product information with the price information of the product, information indicating whether or not the product is a prize-winning product, etc. The product information, product name, selling price, prize-winning identification information, and prize name are prepared as data items and all of these information concerning the products that are dealt are stored in an associated manner inside memory unit 33.

The product information that is output from reader unit 20 is, for example, an eight-digit numerical information with which the upper four digits are allocated to the product item number and client identification and the lower four digits are allocated to the serial number. In regard to the product name and selling price, character and numerical information that are input in advance from operation unit 35 are stored, and the same information are stored for the same product item. [0027] The prize-winning identification information is a numerical information that is either "1," which indicates winning, or "0," which indicates non-winning, and is set by operations under the setting mode of system control unit 30, which shall be described later. The prize name is the information on the name of the prize to be awarded to a winner and character information that is input in advance from operation unit 35 is stored as the prize name.

[0028] This information set of product information, product name, sellingprice, prize-winning identification information, and prize name are arranged in the order of increasing product information (serial number), and the table data concerning all delivered products (in other words, all product information that have the possibility of being output from reader unit 20 during selling) are arranged in this manner.

[0029] With the example of the table data shown in Fig. 2, products, with which the sum of the numerical values of the last two digits of the serial number is "5," are selected as prize-winning products, and for example, it is indicated that a book coupon, which is the third-place prize, is allocated to the product with the serial number, "0150." [0030] The operations of system control unit 30 shall now be described. Fig. 3 is a flowchart illustrating the operations of system control unit 30, which are executed after the power of prize-winning product selection device 1 is turned on. [0031] First in step S101, a menu screen for selecting the operation mode is displayed on display unit 40. In step S102, it is judged which of the product management mode and the setting mode is selected by the operation mode input from operation unit 35, and if the setting mode is selected by the selected operation mode, step \$103 is entered while if the product management mode is selected, step S160 is entered. Here, for the sake of description, the case where the setting mode is selected shall be described first. If the setting mode is selected, first a display, requesting the reading of the barcode containing the information on the first serial number of the delivered products and the barcode containing the information

on the last serial number, is displayed to define the range

of the prize-winning product selection, and the reading of these two barcodes is awaited (steps S103 and S104).

[0032] Though the determination of the range of prize-winning selection may obviously take the form of inputting using operation part 35, since the form of inputting using barcodes is more secure and faster, barcode input is employed in the present embodiment.

[0033] Furthermore with the present embodiment, the barcode containing the information on the first serial number and the barcode containing the information on the last serial number are printed in advance on a delivery slip that is received from a manufacturer when the products are delivered, and by making reader unit 20 read the two barcodes on the delivery slip, the user's task is made efficient.

[0034] After the barcodes on the delivery slip have been read as described above and the product information with the first serial number and the last serial number are input from reader unit 20, table data for managing each individual product are prepared from the input information, etc.

[0035] That is, in memory unit 33, regions for storing information according to each of the various items are secured in correspondence to all products, from the product of the first serial number to the product of the last serial number (all

product information that have the possibility of being read by reader unit 20 during selling), addresses corresponding to the respective items are designated successively, and table data are prepared by successively writing the product names, selling prices, and other numerical values and character information set in advance by operation unit 35, etc.

[0036] In this process, in the region of the prize-winning identification information, "0," which indicates non-winning, is stored as the initial value (step S106). System control unit 30 then executes a program corresponding to a predetermined algorithm for automatically selecting products that are to be prize-winning products and selects the serial numbers (prize-winning serial numbers) of products that are to be prize-winning (step S108).

[0037] Though various algorithms can be considered for the selection of the prize-winning serial number that is executed here, in the present embodiment, one of the following four algorithms designated arbitrarily by means of operation unit 35 is executed.

[0038] That is, in a first method, products of serial numbers, with which the last three digits match a three-digit numerical value (for example, "432") that is set by an arbitrary numerical value input from operation unit 35, are selected as prize-winning

products.

[0039] In a second method, serial numbers, with which the sum of the last two digits of the serial number is equal to an arbitrary number (for example, "5"), which is input from operation part 35, are selected. In a third method, the number of prize-winning serial numbers is input from operation unit 35 and random numbers are generated to select different serial numbers for the amount of prize-winning serial numbers.

[0040] In a fourth method, when automatic determination of a prize-winning number is commanded from operation unit 35, a random number is generated, and the serial number, which is stored in the address incremented by the amount corresponding to the random number from the head address of the table data region wherein the serial numbers are stored, is selected as a prize-winning number.

[0041] In the description of the operations of the embodiment, it shall be deemed that the second method described above is employed. Since as shown in Fig. 2, the serial number corresponds to the lower four digits of the product information, it may be interpreted without any problem to be practically the product information.

[0042] Memory 30 is then set to the writing mode, the addresses in which the prize-winning identification information,

corresponding to the serial numbers, which were selected in step S108 to be those for which the sum of the last two digits is "5," are designated successively, and "1," which indicates a prize-winning product, is written into these addresses. After completion of writing into memory unit 30, memory unit 30 is returned to the reading mode and the table data are thereby completed. Table data 32, such as shown in Fig. 2, are thereby prepared (steps S112 to S115).

[0043] Then, for confirmation, the serial numbers of the prize-winning products and the total number of prize-winning products are displayed, that the setting of the prize-winning products has been completed is displayed on display unit 30, and the issuing of a command from operation unit 35 indicating whether or not this prize-winning product setting is satisfactory is awaited (step S116 and step S117).

[0044] If in step S117, the command input from operation unit 35 is YES, the operation mode is changed to the product management mode and step 160 is entered (step S120), while if the input command is NO, step S103 is returned to in order to perform the setting of the prize-winning products from the beginning. [0045] Since the table data are prepared based on barcode information that are attached to the delivered products, the products that are subject to becoming prize-winning products

are restricted to products of code information with the possibility of being read by reader unit 20 during the sale of the products.

[0046] Products, which are sold in other retail stores and do not have the possibility of reader unit 20 reading the corresponding information, will thus not be selected as prize-winning products, and also in the processes of steps S103 and S104, by appropriate selection of the two barcode information that are input, the prize-winning products may be restricted to specific product items or products delivered on a specific delivery date. The specifying of the prize-winning products can thus be set freely within the range of delivered products. [0047] In the product management mode, which is started from step S160, first a display instructing the input of the barcode of a product is displayed on display unit 30, the input of product information from reader unit 20 is awaited, table data are referenced based on the input product information (information including the serial number), the product name, selling price, prize-winning product information of the product corresponding to the input product information are referenced to ascertain whether or not the product is a prize-winning product, and the result is displayed on the display unit (steps S160, S162, and S164).

[0048] The lottery selection operation of the prize-winning product is thus performed in association with the reading operation of the barcode 5 of the product. Meanwhile, if the power of prize-winning product selection device 1 is not turned off, step 102 is returned to and the operations are continued while if the power is turned off, this program is ended.

[0049] Though employment in a retail store was premised with the above-described embodiment, this invention is not limited thereto and may also be applied to the holding of a prize event readily in a pachinko parlor or other gaming parlor using code information attached to freebies, such as rice balls and other light meals that are distributed free of charge as a part of customer services, and prizes that are exchanged with pachinko balls, etc.

[0050]

[Effect of the Invention] As described above, with this invention's prize-winning product selection method and prize-winning product selection device, since prize-winning products are selected using code information that are attached to products, prize events can be held readily without having to prepare lottery tickets and other articles each time.

[BRIEF DESCRIPTION OF THE DRAWINGS]

[Fig. 1] A block diagram of a prize-winning product selection

device of an embodiment of this invention.

- [Fig. 2] A diagram showing an example of table data stored in a memory unit of the prize-winning product selection device.
- [Fig. 3] A flowchart for describing the operations of a system control unit of the prize-winning product selection device. [Description of the Symbols]
- 1 Prize winning selection device
- 5 Barcode reader unit (reading means)
- 30 System control unit (selection means, judging means)
- 33 Memory unit (storage means)
- 35 Operation unit
- 40 Display unit (notification means)



